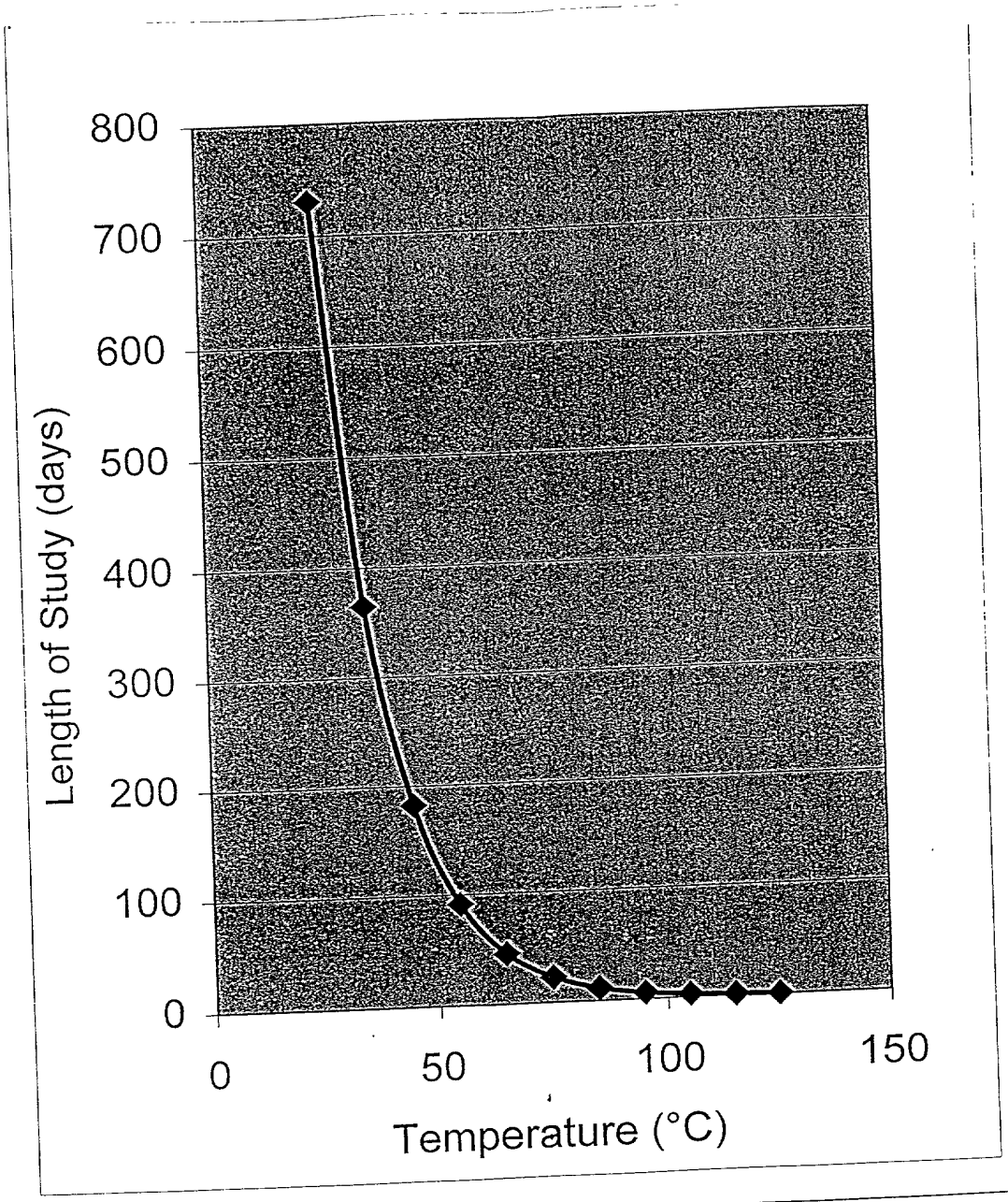


Figure 1 Temperature effects on relative rates and length of degradation studies required.

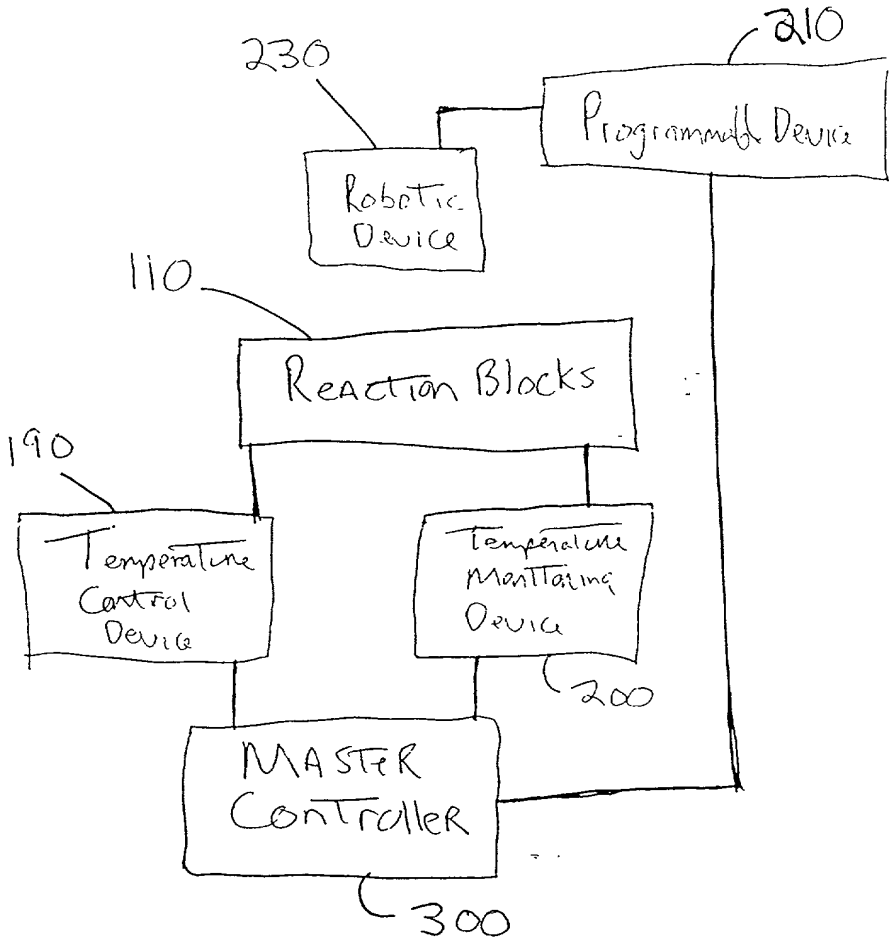

230
210
Programmable Device
Robotic Device
110
Reaction Blocks
190
Temperature Control Device
Temperature Monitoring Device
200
MASTER Controller
300

FIG. 2

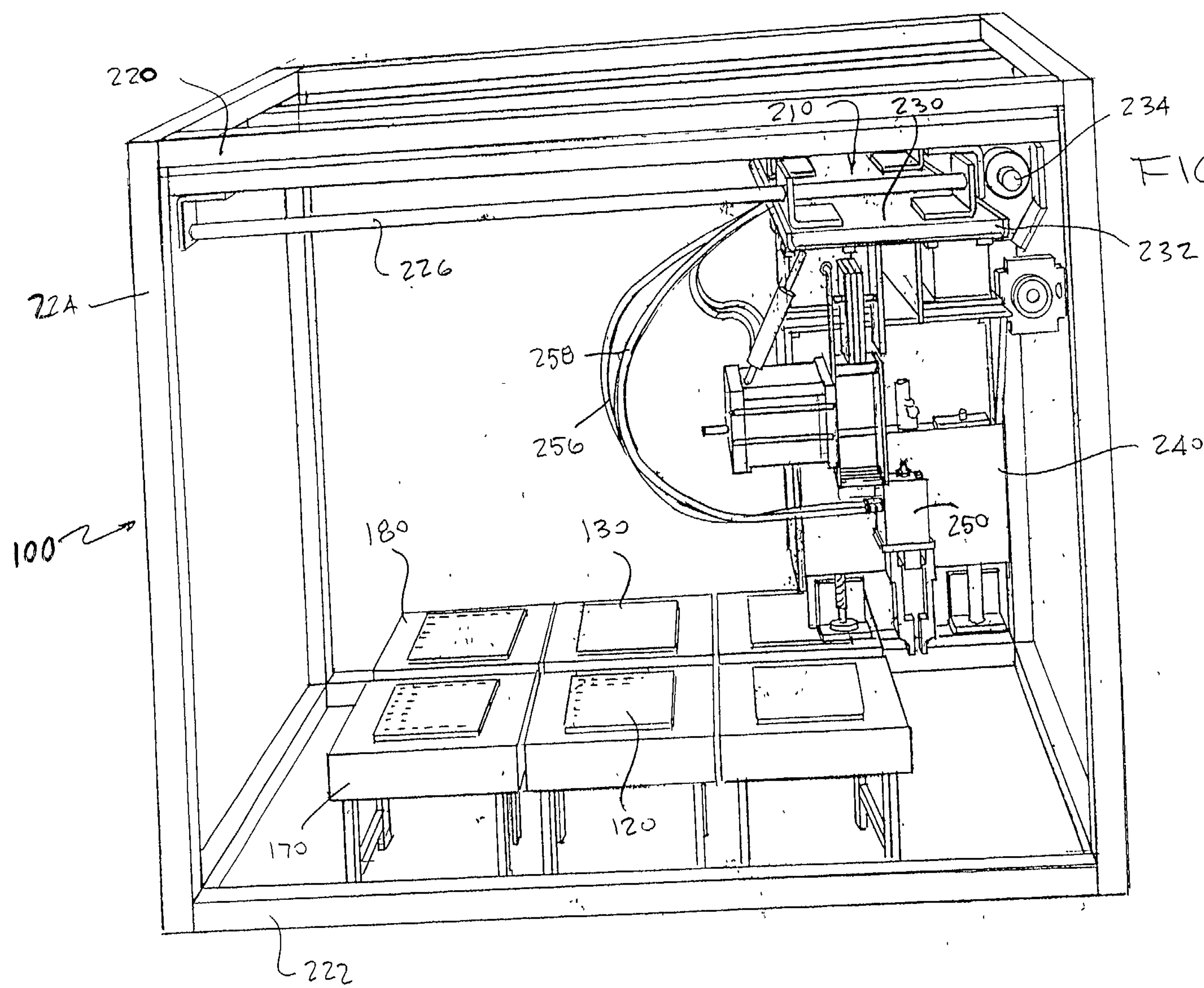

220
210
230
234
232
226
22A
258
256
240
250
100
180
130
120
170
222

FIG 3

A65010H805

FIG. 4

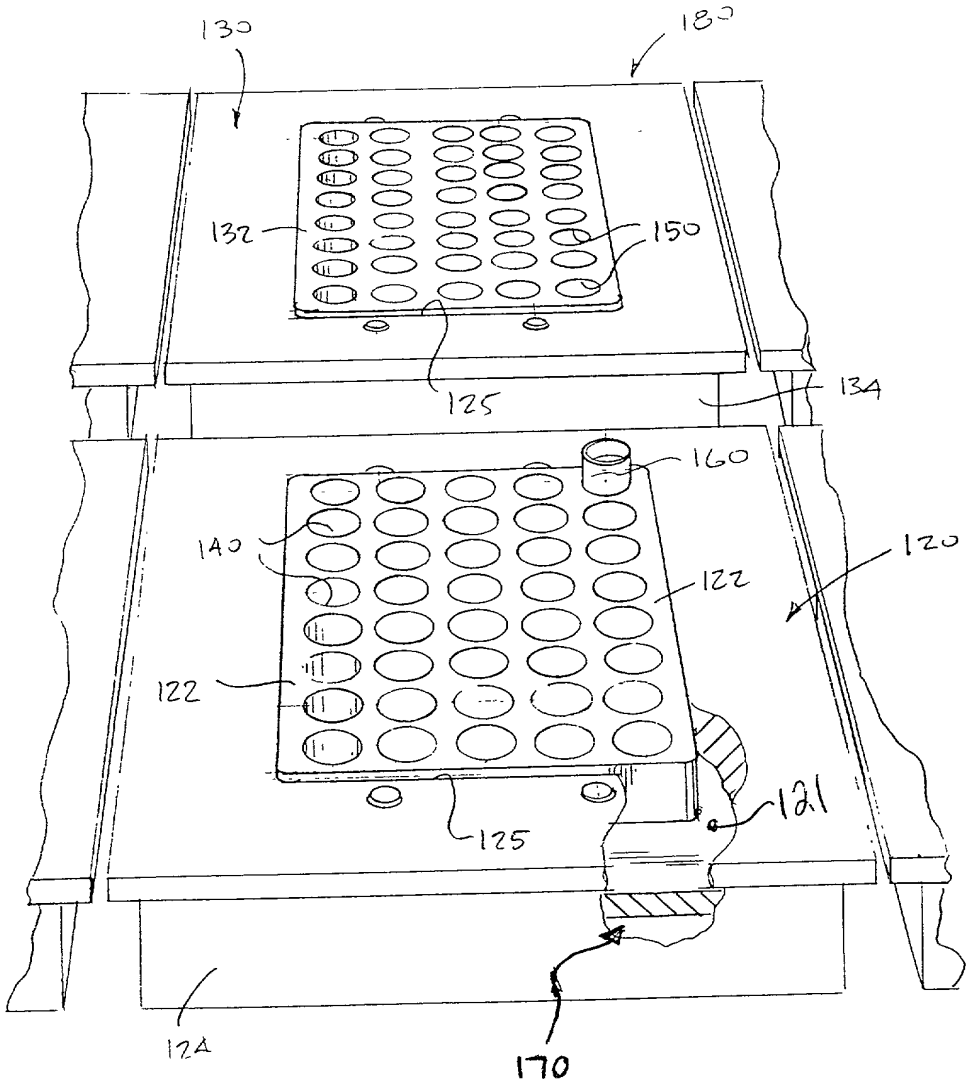
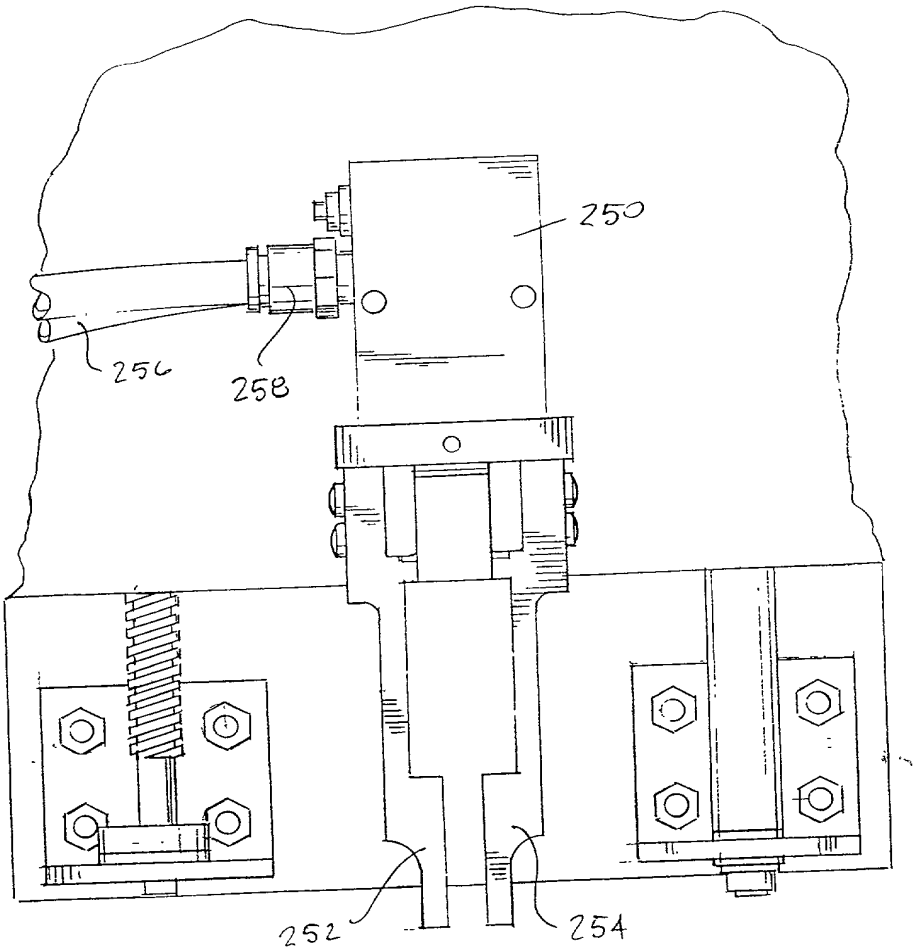


FIG 5



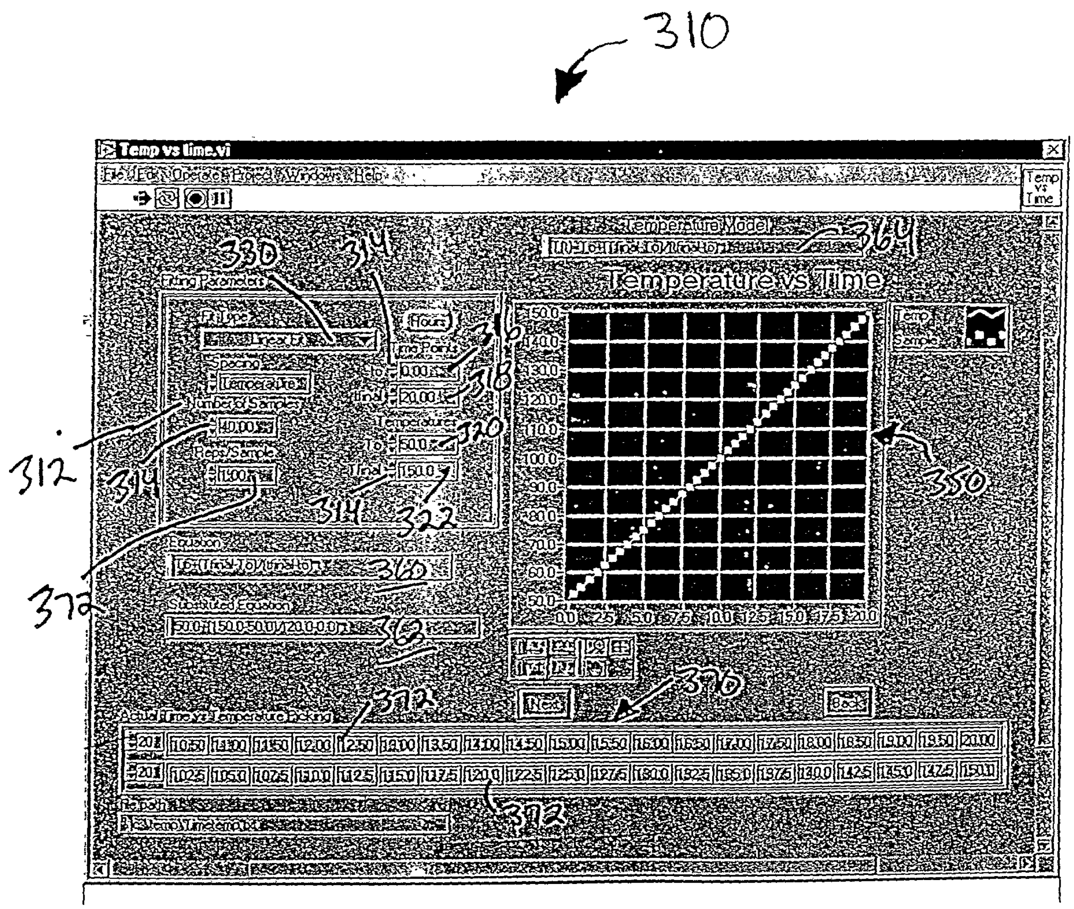

310
Temp vs time.vi
File Edit Operate Project Windows Help
Temp vs Time
Temperature Model
Temperature vs Time
Fitting Parameters
Hours
Time Points
Number of Samples
Reps/Sample
Temperatures
Equation
Substituted Equation
Actual Time vs Temperature Pairing
Next
Back
330
314
316
318
320
322
312
372
350
360
362
364
370

FIG. 6

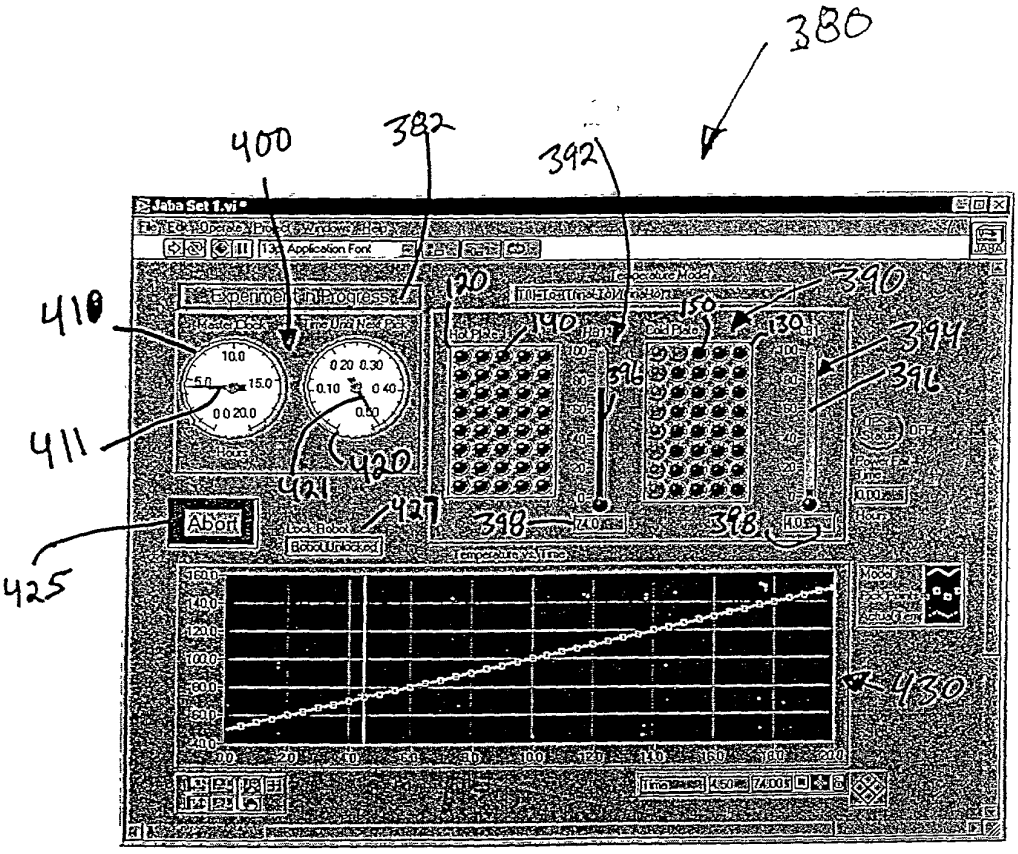

380
400
392
392
Jaba Set 1.vi
Experiment in Progress
410
411
420
421
425
427
120
140
150
130
390
394
396
398
398
Abort
Lock Robot
Temperature vs Time
430

FIG. 7

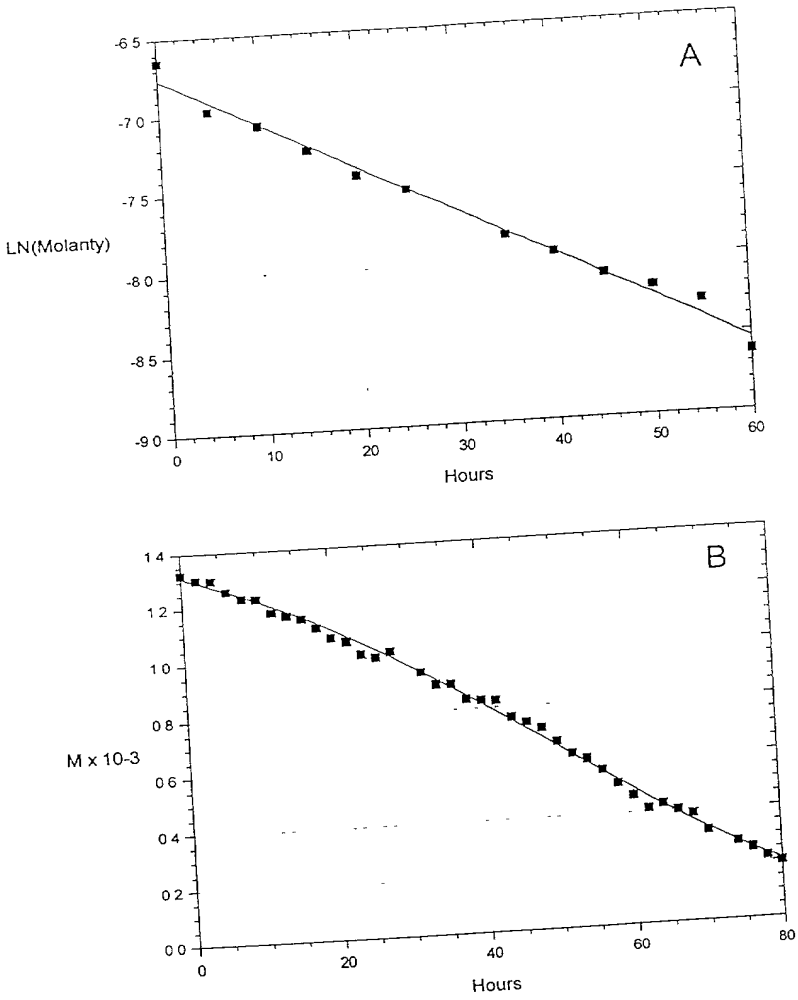
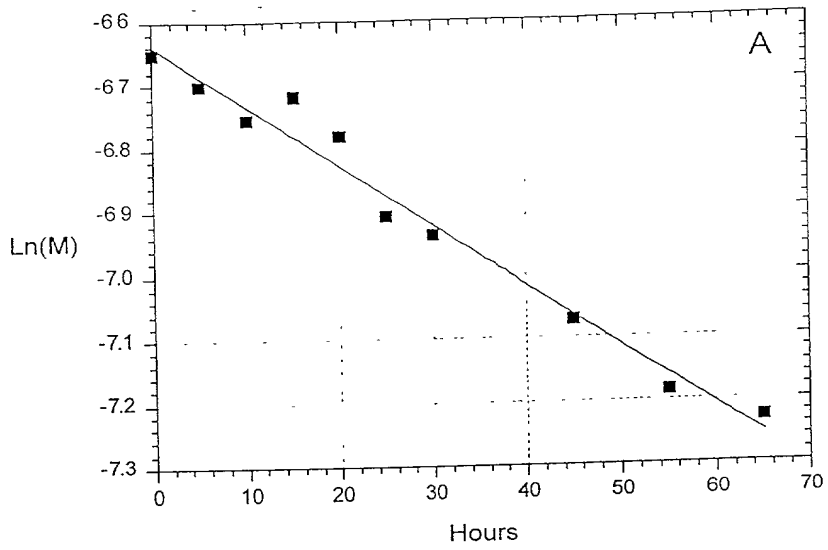


Figure 8 Data for pH 1.0 reactions: isothermal at 85 °C (A); nonisothermal, 50 to 100 °C over 80 hours, linear program (B).



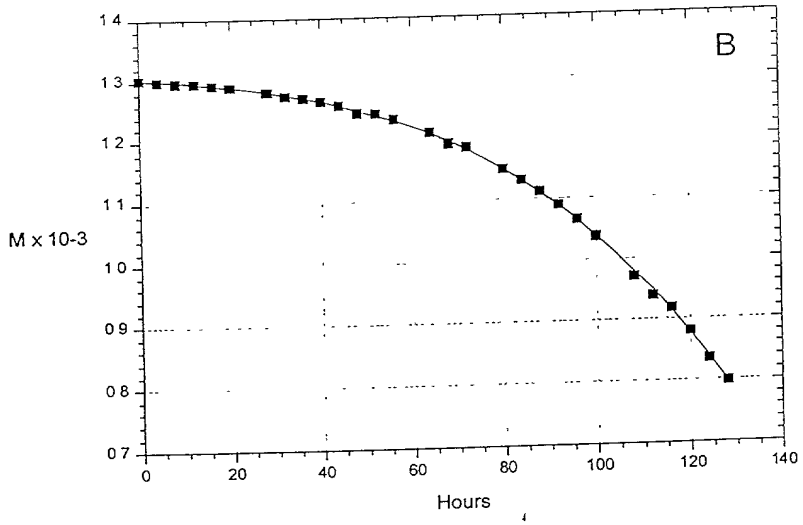


Figure 9 Data for pH 11.7 reactions: isothermal at 85 °C (A); nonisothermal, 50 to 100 °C over 160 hours, linear program (B).

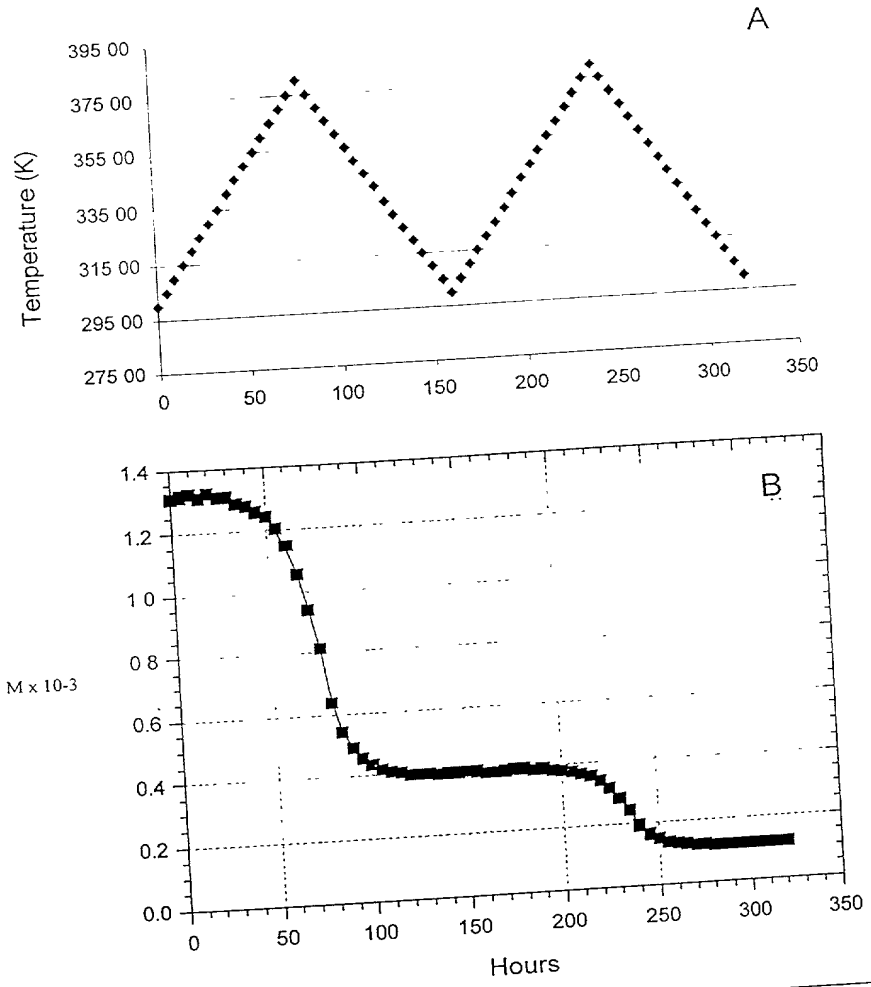


Figure 10 "UDUD" temperature program (A) and corresponding simulated nonisothermal data (B; $A=2.43 \times 10^{10}$ h^{-1} and E=20.42 Kcal/mole;